

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,409,266 B2  
APPLICATION NO. : 10/739453  
DATED : August 5, 2008  
INVENTOR(S) : Keita Hara et al.

Page 1 of 6

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**Col. 44 line 25 thru col. 46 line 53**

**Delete Claims 1-10 as printed in the above-identified patent document and substitute the following Claims 1-10 therefor:**

1. A group robot system comprising a plurality of sensing robots,  
and a control apparatus controlling (i) an operation of each of said plurality of  
sensing robots, and (ii) a definition of areas in which ~~each of said plurality of~~ <sup>of</sup>  
sensing robots are respectively located relative to said control apparatus,  
wherein said control apparatus responds to a detection of  
an object by one of said plurality of sensing robots by providing  
a control such that each of said plurality of sensing robots,  
other than said sensing robot that has detected said object,  
moves outside of the respective area relative to said control  
apparatus in which it was located prior to the detection of the  
object,
- wherein each of said plurality of sensing robots is equipped with the  
same sensor function and a predetermined sensor function  
level relative to the others of said plurality of sensing robots,  
said control apparatus responds to a detection of an object by  
one of said plurality of sensing robots (a) by providing a control  
such that another of said plurality of sensing robots that is  
equipped with a function level differing from the function level of  
said one of said sensing robots that detected said object  
conducts a further search for said object, and (b) by providing a  
control such that a sensing robot ~~other than~~ <sup>plurality of</sup>  
said one of said sensing robots that detected the object and  
said sensing robot conducting said further search moves  
outside of a respective area relative to said control apparatus in  
which it was located prior to the detection of the object.

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Page 2 of 6

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2. The group robot system according to claim 1, wherein  
said control apparatus enables the predetermined sensor function level of a selected one of the plurality of sensing robots, and when said selected one of said plurality of sensing robots having the enabled function level detects an object, said control apparatus enables the predetermined function level of another of said plurality of sensing robots that differs from the function level of said one of said plurality of sensing robots that detected the object so as to provide a control such that said another of said plurality of sensing robots conducts a further search for said object.
3. The group robot system according to claim 1, wherein  
said relative sensor function levels of said plurality of sensing robots is determined by any of a sensing resolution, a sensor type, and a processing method of sensor information.
4. The group robot system according to claim 1, wherein  
said plurality of sensing robots and said control apparatus conduct communication in a hierarchical manner wherein said control apparatus has the highest level of hierarchy, and  
said control apparatus responds to a detection of an object by  
one of said plurality of sensing robots, providing control such that said one of said plurality of sensing robots that has detected the object and a another of said plurality of sensing robots located at a hierarchical communication position between said one of said plurality of sensing robots and said control apparatus that relays communication when hierarchical communication is conducted from said one of said plurality of sensing robots to said control apparatus moves outside a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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Page 3 of 6

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5. The group robot system according to claim 1, wherein  
said control apparatus includes a pheromone robot controlling travel of at least one of said sensing robots,  
and wherein said pheromone robot moves, when one of  
said plurality of sensing robots detects an object, to a  
neighborhood of said object.
6. The group robot system according to claim 1, wherein  
said control apparatus includes a pheromone robot controlling travel of at least one of said plurality of sensing robots,  
said pheromone robot being responsive to a detection of an object by one of said plurality of sensing robots so as to provide a control such that another of said plurality of sensing robots different from the one of said plurality of sensing robots that has detected said object moves to a neighborhood of said pheromone robot.
7. The group robot system according to claim 1, wherein at least one of  
said sensing robots is capable of fluttering flight by fluttering motion.
8. A sensing robot capable of fluttering flight included  
in a group robot system comprising a plurality of sensing robots and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which of each of said plurality of ~~sensing~~ robots are respectively located relative to said control apparatus, wherein said control apparatus responds to detection of an object by one of said plurality of sensing robots so as to provide a control such that another of said plurality of sensing robots moves outside the area relative to said control apparatus in which it was located prior to the detection of the object,

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Page 4 of 6

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot [REDACTED] other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

9. A base station included in a group robot system

comprising a plurality of sensing robots including at least one sensing robot capable of fluttering flight through a fluttering motion and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which each of said plurality of sensing robots are respectively located relative to said control apparatus,

wherein said control apparatus responds to a detection of an object by one of said plurality of sensing robots by providing a control such that each of said plurality of sensing robots, other than said sensing robot that has detected said object, moves outside of the respective area relative to said control apparatus in which it was located prior to the detection of the object, and wherein said base station corresponds to said control apparatus,

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Page 5 of 6

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot [REDACTED] other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

10. A pheromone robot included in a group robot system comprising a plurality of sensing robots including at least one sensing robot capable of fluttering flight through a fluttering motion and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which of each of said plurality of sensing robots are respectively located relative to said control apparatus,

wherein said control apparatus responds to a detection of an object by one of said plurality of sensing robots by providing a control such that each of said plurality of sensing robots, other than said sensing robot that has detected said object, moves outside of the respective area relative to said control apparatus in which it was located prior to the detection of the object, and,

wherein said pheromone robot controls travel of at least one of said plurality of sensing robots capable of fluttering flight through a fluttering motion,


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Page 6 of 6

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot  other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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This certificate supersedes certificate of correction  
issued January 6, 2009.

